



DEPARTMENT OF THE NAVY

NAVAL SEA SYSTEMS COMMAND
1333 ISAAC HULL AVE SE
WASHINGTON NAVY YARD DC 20376-0001

IN REPLY TO

3960
Ser 63/0358
15 Jan 03

From: Commander, Naval Sea Systems Command

Subj: SHIPBOARD SYSTEMS CERTIFICATION REQUIREMENTS FOR
SURFACE SHIP INDUSTRIAL PERIODS

Ref: (a) NAVSEA Instruction 3960.5, Subj: Policy on Ship
Testing
(b) NAVSEA S9040-AA-GTP-010/SSCR Rev 4, Shipboard Systems
Certification Requirements for Surface Ship
Industrial Periods (Non-Nuclear) of 1 Jun 98

Encl: (1) Change 1 to NAVSEA S9040-AA-GTP-010/SSCR Rev 4
(Pages 7-3 & 7-4), Ship/System Electromagnetic
Compatibility (EMC)

1. In accordance with reference (a), NAVSEA has reviewed and approved the Ship/System Electromagnetic Compatibility (EMC) certification requirement (enclosure (1)). This replaces the Electromagnetic Interference (EMI) Abatement certification requirement (page 7-3) of reference (b).

2. Comments on subject manual should be directed to the NAVSEA Test and Evaluation Office (SEA 63) at (202) 781-0809 or via e-mail at TestEvaluation@navsea.navy.mil. The NAVSEA Test and Evaluation Web Site will have the changed page and updated certification manual available in PDF format at www.navsea.navy.mil/navyseate.

3. The SEA 63 point of contact is George Axiotis, SEA 632, at (202) 781-0424.

M. FINNERTY
By direction

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CERTIFICATION REQUIREMENT DATA SHEET

TO BE CERTIFIED: Ship/System Electromagnetic Compatibility (EMC).	
PURPOSE: Certify surface ship compliance with OPNAV policy for Electromagnetic Compatibility for ship and battle force operations.	
SOURCE OF REQUIREMENT: OPNAVINST 2450.2, EMC Program within the Department of the Navy dtd 8 Jan 1990.	
CERTIFICATION TESTING (INSPECTION) IS DONE BY: NAVSEA 623 designated test team, Naval Supervising Activity (NSA), FTSC, IMA, SPM, PARM, or contractor witnessed by government activity. See Note 5.	
CERTIFYING AUTHORITY: NAVSEA 623.	CERTIFICATION IS MADE TO: Ship Certification to Ship's C.O., TYCOM, and Ship Program Manager (SPM). System Certification to Program Acquisition Resource Manager (PARM).
TIME FRAME RELATIVE TO OTHER EVENTS: Ship EMC Certification for SCN ships will be accomplished prior to ship delivery. For FMP ships inside CNO Availabilities, Ship EMC Certification will be performed inside the warranty period. System EMC Certification will occur following installation and completion of a System Operation Verification Test (SOVT) or other system operation test.	
APPLICABLE TEST PROCEDURES: NAVSEA Drawing STD 407-5291780(), Standard EMI Survey Procedures. Test procedures and baseline drawings are available through the Shipboard Electromagnetic Compatibility Improvement Program (SEMCIP) Technical Assistance Network (STAN) (www.semciip.com).	
PREREQUISITES: For Ship/System EMC Certification, topside and below deck installations are complete and applicable systems operability testing has been completed. Additionally, for System EMC Certifications, DD Form 1494 for frequency allocation is submitted.	
SUPPORT SERVICES REQUIRED: Systems involved in the test must be manned and operated by ship's force or shipyard personnel under the direction of the test team leader. Testing will be conducted either in-port or at sea, as specified in the test procedure in STAN.	
NOTES: 1. Guidance for Ship/System EMC certification requirements, frequency allocation and testing is located in NAVSEA Drawing STD 407-5291780(), Standard Electromagnetic Interference (EMI) Survey Procedures, Volume 1. 2. Ship EMC Certification testing by NAVSEA 623 is required for all SCN ships to establish an EMC baseline. Subsequent Ship EMC Certifications will be accomplished: a. For deployers after Target Configuration Date (TCD), typically 6 months prior to deployment. b. Following industrial availabilities greater than 120 days. c. Every three years for non-deployers. 3. The criteria for Ship EMC Certification are as follows: a. All available EMI fixes have been installed. b. All uncorrected mission-degrading EMI problems have been identified and reported to the C.O. c. Intermodulation Interference (IMI) does not exceed 19 th order. 4. Funding for Ship EMC Certification testing is provided by: a. Ship Program Manager (SPM) for new construction ships and major availabilities (i.e. RCOH). b. Type Commander for in-service ships.	

5. System EMC Certification is required for a new electrical/electronic systems installed by SHIPALT, AER, TIA or other alteration, after the ship is placed in-service. It will be conducted following the SOVT or other operation test for the newly installed system. NAVSEA 623 test team will conduct System EMC Certification testing for the first two ships of each class, flight, baseline as applicable. Subsequent System EMC Certification testing can be accomplished by PARM, SPM, NSA, FTSC, IMA, or contractor witnessed by government activity.
6. The criteria for System EMC Certification are as follows:
 - a. The system has an approved (Stage 4) DD-1494 Application for Frequency Allocation (J/F-12).
 - b. No mission-degrading EMI has been introduced by installation of the system.
 - c. EMI fixes have been installed to correct mission-degrading EMI caused by the installation of the system.
7. Funding for System EMC Certification testing is provided by:
 - a. PARM
 - b. Activity sponsoring the system installation.